

## ***ANNEX B***

***The following pages contain a Program of Study for transfer and a  
Prerequisite Flowchart  
for each of these disciplines:***

***Biology  
Biomedical Engineering  
Business  
Chemical Engineering  
Chemistry  
Civil Engineering  
Computer Information Systems & Sciences  
Electrical Engineering  
Industrial Engineering  
Management Information Systems  
Mathematics  
Mechanical Engineering***



## Community College Program of Study for Transfer to a Biology Program

### FRESHMAN YEAR

First Semester (Fall)				Second Semester (Spring)			
		Course	SCH			Course	SCH
BIOL	1306 or 1311	Biology for Science Majors I or General Botany <sup>1</sup>	3	BIOL	1307 or 1313	Biology for Science Majors II or General Zoology <sup>1</sup>	3
BIOL	1106 or 1111	Biology for Science Majors I lab or General Botany lab <sup>1</sup>	1	BIOL	1107 or 1113	Biology for Science Majors II lab or General Zoology lab <sup>1</sup>	1
CHEM	1311	General Chemistry I	3	CHEM	1312	General Chemistry II	3
CHEM	1111	General Chemistry I lab	1	CHEM	1112	General Chemistry II lab	1
MATH	####	Mathematics Option <sup>2</sup>	3-5	MATH	####	Mathematics Option <sup>2</sup> or Texas Core Requirement (if math complete)	3
XXXX	####	Texas Core Curriculum Requirement	3	XXXX	####	Texas Core Curriculum Requirement	3
Semester Credit Hours 14-16				Semester Credit Hours 14			

### SOPHOMORE YEAR

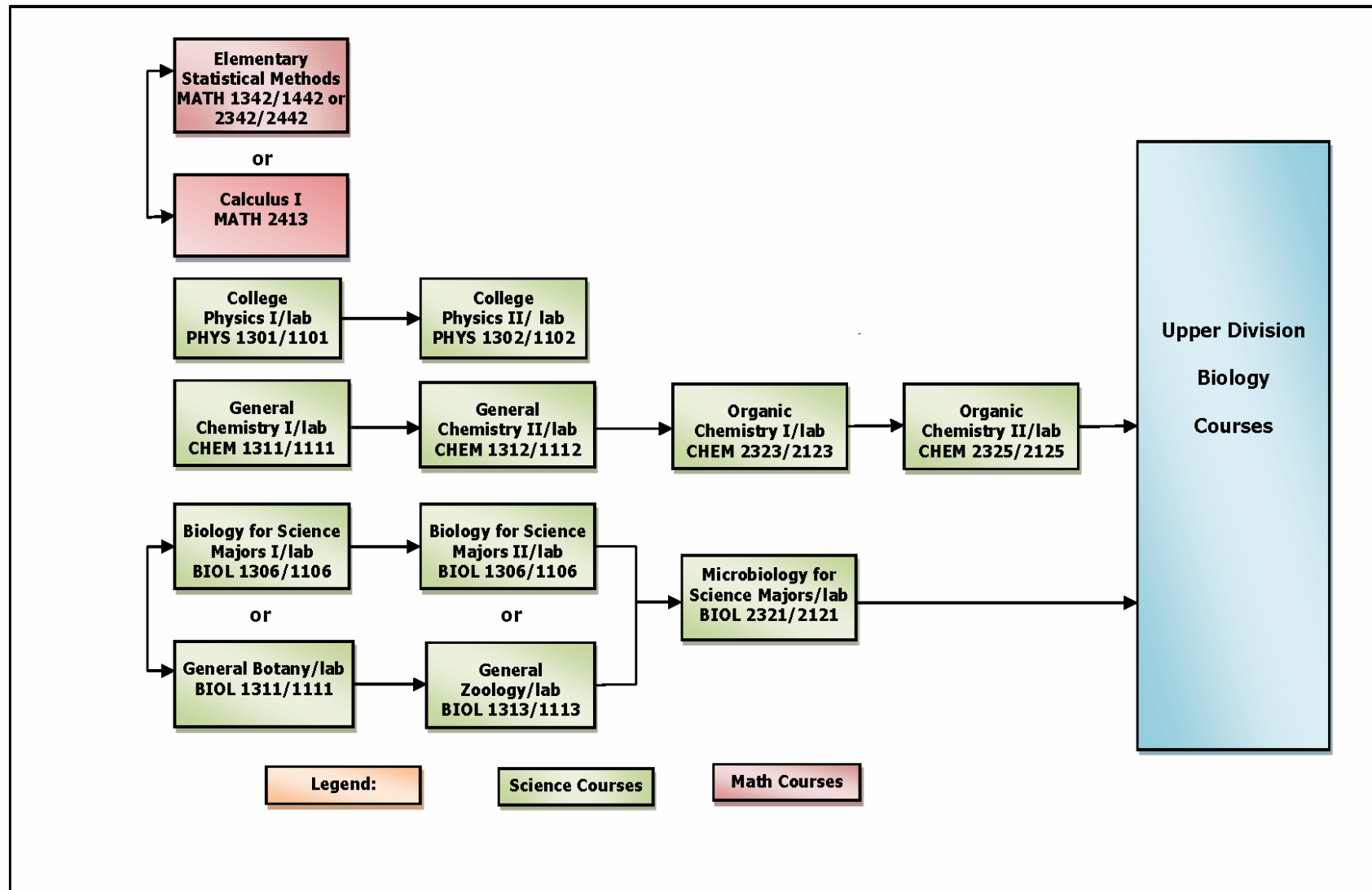
First Semester (Fall)				Second Semester (Spring)				
	Course		SCH		Course		SCH	
CHEM	2323	Organic Chemistry I	3	BIOL	2321	Microbiology for Science Majors	3	
CHEM	2123	Organic Chemistry I lab	1	BIOL	2121	Microbiology for Science Majors lab	1	
MATH	####	Mathematics Option <sup>2</sup> or Texas Core Requirement (if math complete)	3	CHEM	2325	Organic Chemistry II	3	
XXXX	####	Texas Core Curriculum Requirement	3	CHEM	2125	Organic Chemistry II lab	1	
PHYS	1301	College Physics I	3	PHYS	1302	College Physics II	3	
PHYS	1101	College Physics I lab	1	PHYS	1102	College Physics II lab	1	
Semester Credit Hours			14	XXXX	####	Texas Core Curriculum Requirement	3	
							Semester Credit Hours	15

#### NOTES:

<sup>1</sup>Students must complete either the BIOL 1306/1106 and 1307/1107 sequence or the BIOL 1311/1111 and 1313/1113 sequences. Courses from these sequences may not be combined.

<sup>2</sup>Begin mathematics coursework according to placement by initial institution. Maintain continuous enrollment until final mathematics level is achieved. Complete through MATH 1342 or 1442 or 2342 or 2442 Elementary Statistical Methods, or MATH 2313 or 2413 or 2513 Calculus I as determined by four-year degree program. The student is advised to check with the school to which he or she intends to transfer for specific requirements and applicability of the mathematics course to the biology major at that institution.

## Biology Prerequisite Flowchart



## Community College Program of Study for Transfer to a Biomedical Engineering Program

### FRESHMAN YEAR

First Semester (Fall)			SCH	Second Semester (Spring)			SCH
MATH 2413	Calculus I		4	MATH 2414	Calculus II		4
CHEM 1311	General Chemistry I		3	PHYS 2325	University Physics I		3
CHEM 1111	General Chemistry I lab		1	PHYS 2125	University Physics I lab		1
ENGR 1201	Introduction to Engineering		2	BIOL 1406	Biology I with Lab		4
XXXX ####	Texas Core Curriculum		3	XXXX ####	Texas Core Curriculum		3
XXXX ####	Texas Core Curriculum		3	XXXX ####	Texas Core Curriculum		3
			<b>16</b>				<b>18</b>

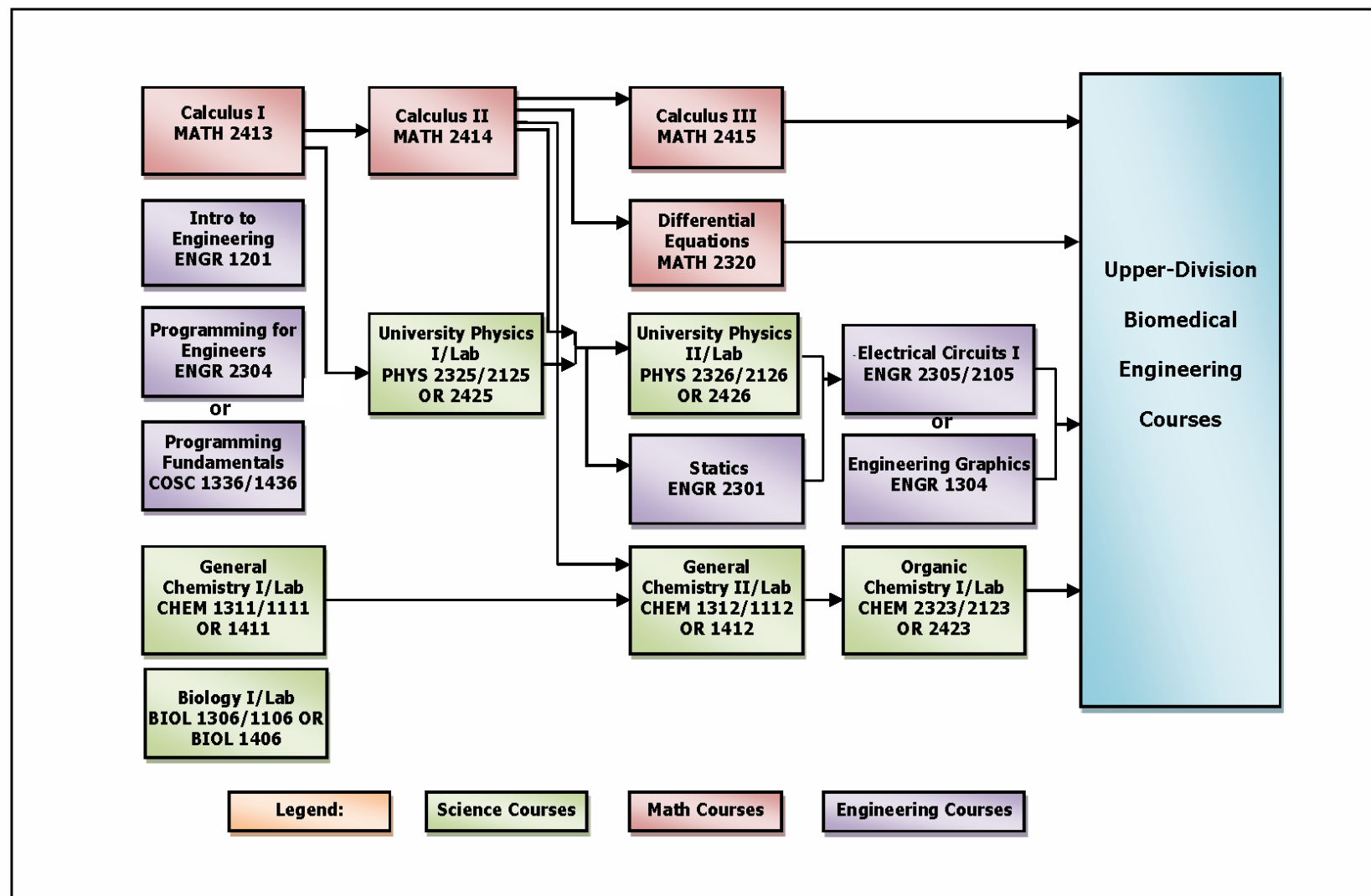
### SOPHOMORE YEAR

First Semester (Fall)			SCH	Second Semester (Spring)			SCH
MATH 2415	Multi-Variable Calculus III		4	MATH 2320	Differential Equations		3
CHEM 1312	General Chemistry II		3	ENGR 2305	<sup>2</sup> Electrical Circuits I		3
CHEM 1112	General Chemistry II lab		1	ENGR 2105	Electrical Circuits I lab		1
PHYS 2326	University Physics II		3	CHEM 2323	Organic Chemistry		3
PHYS 2126	University Physics II lab		1	CHEM 2123	Organic Chemistry lab		1
ENGR 2304	<sup>1</sup> Programming for Engineers		3	ENGR 2301	Engineering Mechanics: Statics		3
XXXX ####	Texas Core Curriculum		3	XXXX ####	Texas Core Curriculum		3
			<b>18</b>				<b>17</b>

<sup>1</sup>COSC 1436/1336, Programming Fundamentals, may be substituted for ENGR 2304, Programming for Engineers

<sup>2</sup>ENGR 1304, Engineering Graphics, may be substituted for ENGR 2305 and 2105, Electrical Circuits I and its accompanying lab

## Biomedical Engineering Prerequisite Flowchart



## Community College Program of Study for Transfer to a Business Program

### FRESHMAN YEAR - Recommended Scheduling Sequence\*

First Semester (Fall)			SCH	Second Semester (Spring)			SCH
ENGL 1301	Composition I		3	ENGL 1302	Composition II OR		3
					or ENGL 2311 Technical & Business Writing		
MATH 1324	Math for Business and Social Sciences I OR		3	MATH 1325	Math for Business and Social Sciences II		3
	or MATH 1325 Math for Business and Social Sciences II				or XXXX ##### OR a higher level math course**		
BCIS 1305	Business Computer Applications		3	ECON 2302	Microeconomics		3
BUSI 1301	Business Principles		3	XXXX #####	Life & Physical Sciences		3
HIST 1301	United States History I		3	HIST 1302	United States History II		3
			<b>15</b>				<b>15</b>

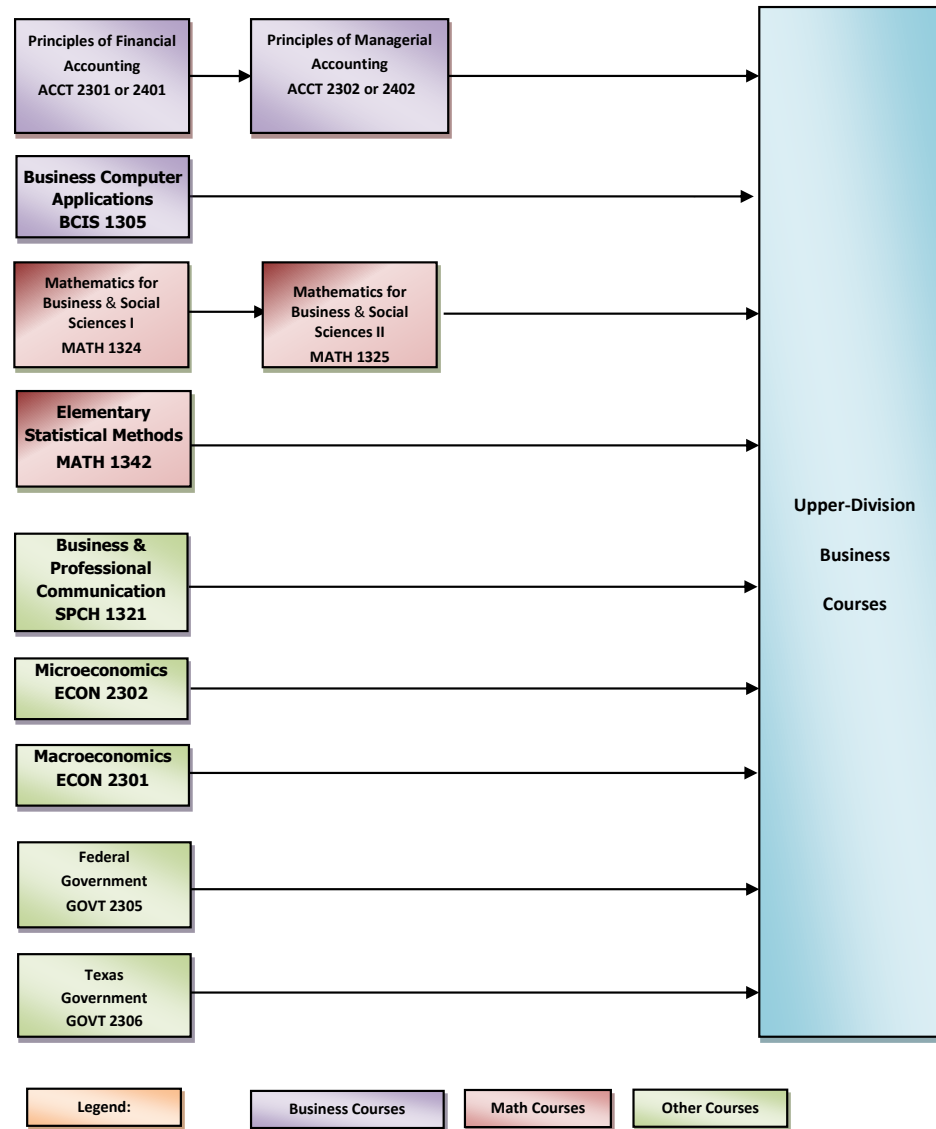
### SOPHOMORE YEAR - Recommended Scheduling Sequence\*

First Semester (Fall)			SCH	Second Semester (Spring)			SCH
ACCT 2301	Principles of Financial Accounting		3	ACCT 2302	Principles of Managerial Accounting		3
ECON 2301	Macroeconomics		3	MATH 1342	Elementary Statistical Methods		3
GOVT 2305	Federal Government		3	GOVT 2306	Texas Government		3
SPCH 1321	Business & Professional Communication		3	XXXX #####	Language, Philosophy & Culture or Elective		3
XXXX #####	Life & Physical Sciences		3	XXXX #####	Creative Arts		3
			<b>15</b>				<b>15</b>

\*Some courses may have pre-requisites. Students are encouraged to contact the institution to which they intend to transfer.

\*\*Some institutions may require higher level calculus for transfer. Students are encouraged to contact the institution to which they intend to transfer.

## Business Prerequisite Flowchart





## Community College Program of Study for Transfer to a Chemical Engineering Program

### FRESHMAN YEAR

First Semester (Fall)		Second Semester (Spring)	
Course	SCH	Course	SCH
MATH 2413 Calculus I	4	MATH 2414 Calculus II	4
CHEM 1311 General Chemistry I	3	PHYS 2325 University Physics I	3
CHEM 1111 General Chemistry I Laboratory	1	PHYS 2125 University Physics I Laboratory	1
ENGR 1201 Introduction to Engineering <sup>2</sup>	2	CHEM 1312 General Chemistry II	3
XXXX ##### Texas Core Curriculum Requirement	3	CHEM 1112 General Chemistry II Laboratory	1
XXXX ##### Texas Core Curriculum Requirement	3	XXXX ##### Technical or Texas Core Curriculum Requirement <sup>4</sup>	3
Semester Credit Hours	16	XXXX ##### Texas Core Curriculum Requirement	3
		Semester Credit Hours	18

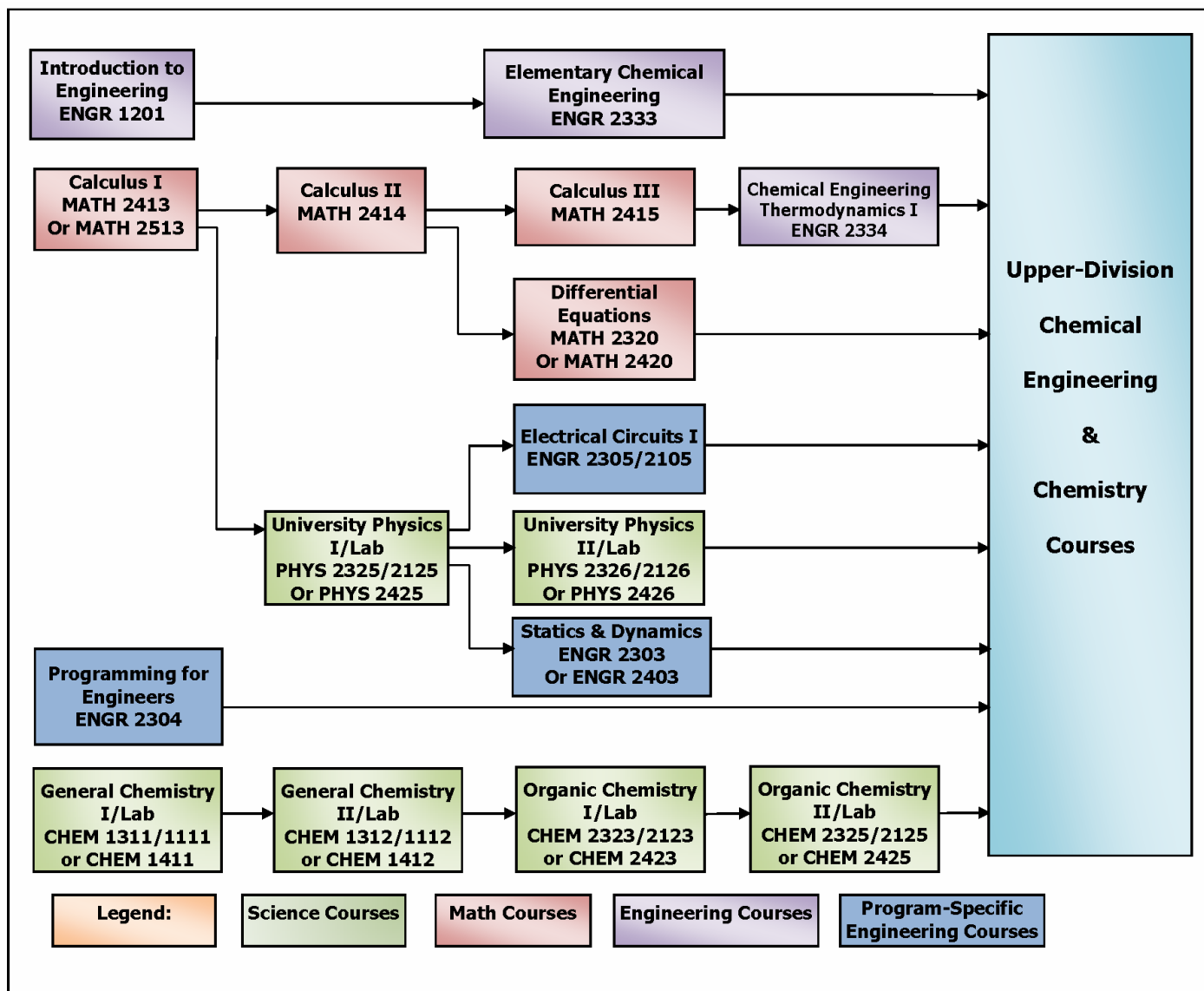
### SOPHOMORE YEAR

First Semester (Fall)		Second Semester (Spring)	
Course	SCH	Course	SCH
MATH 2415 Multi-Variable Calculus (Calculus III) <sup>3</sup>	4	MATH 2320 Differential Equations	3
PHYS 2326 University Physics II	3	CHEM 2325 Organic Chemistry II	3
PHYS 2126 University Physics II Laboratory	1	CHEM 2125 Organic Chemistry II Laboratory	1
CHEM 2323 Organic Chemistry I	3	ENGR 2334 Chemical Engineering Thermodynamics I	3
CHEM 2123 Organic Chemistry I Laboratory	1	XXXX ##### Technical or Texas Core Curriculum Requirement <sup>5</sup>	4
ENGR 2333 Elementary Chemical Engineering	3	XXXX ##### Texas Core Curriculum Requirement	3
XXXX ##### Texas Core Curriculum Requirement	3	Semester Credit Hours	17
Semester Credit Hours	18		

#### Notes:

- 1 Texas Common Course Numbers are used for all TCCN-numbered courses.
- 2 This is a 1 SCH course for some chemical engineering programs.
- 3 Most chemical engineering programs will accept the course MATH 2415/2515 for transfer credit and as applicable to the chemical engineering major, while some will accept the course for transfer credit only. The student is advised to check with the school to which he or she intends to transfer for specific applicability of this course to the chemical engineering major.
- 4 Some chemical engineering programs will accept the courses ENGR 2304 (programming), ENGR 2305/2105 (electrical circuits with laboratory) or ENGR 2303 or 2403 (statics & dynamics) for transfer credit and as applicable to the chemical engineering major, while some will accept the courses for transfer credit only. The student is advised to check with the school to which he or she intends to transfer for specific applicability of these courses to the chemical engineering major and the requisite number of credit hours for the course.
- 5 Some chemical engineering programs require a separate introductory course on computing, while others incorporate the same material into other lower-division courses.

## Chemical Engineering Prerequisite Flowchart



## Community College Program of Study for Transfer to a Chemistry Program

### FRESHMAN YEAR

First Semester (Fall)		Second Semester (Spring)	
Course	SCH	Course	SCH
MATH 2413 Calculus I	4	MATH 2414 Calculus II	4
CHEM 1311 General Chemistry I	3	CHEM 1312 General Chemistry II	3
CHEM 1111 General Chemistry I lab	1	CHEM 1112 General Chemistry II lab	1
XXXX ##### Texas Core Curriculum Requirement	2	XXXX ##### Texas Core Curriculum Requirement	3
XXXX ##### Texas Core Curriculum Requirement	3	XXXX ##### Texas Core Curriculum Requirement	3
XXXX ##### Texas Core Curriculum Requirement	3	XXXX ##### Texas Core Curriculum Requirement	3
Semester Credit Hours 16		Semester Credit Hours 17	

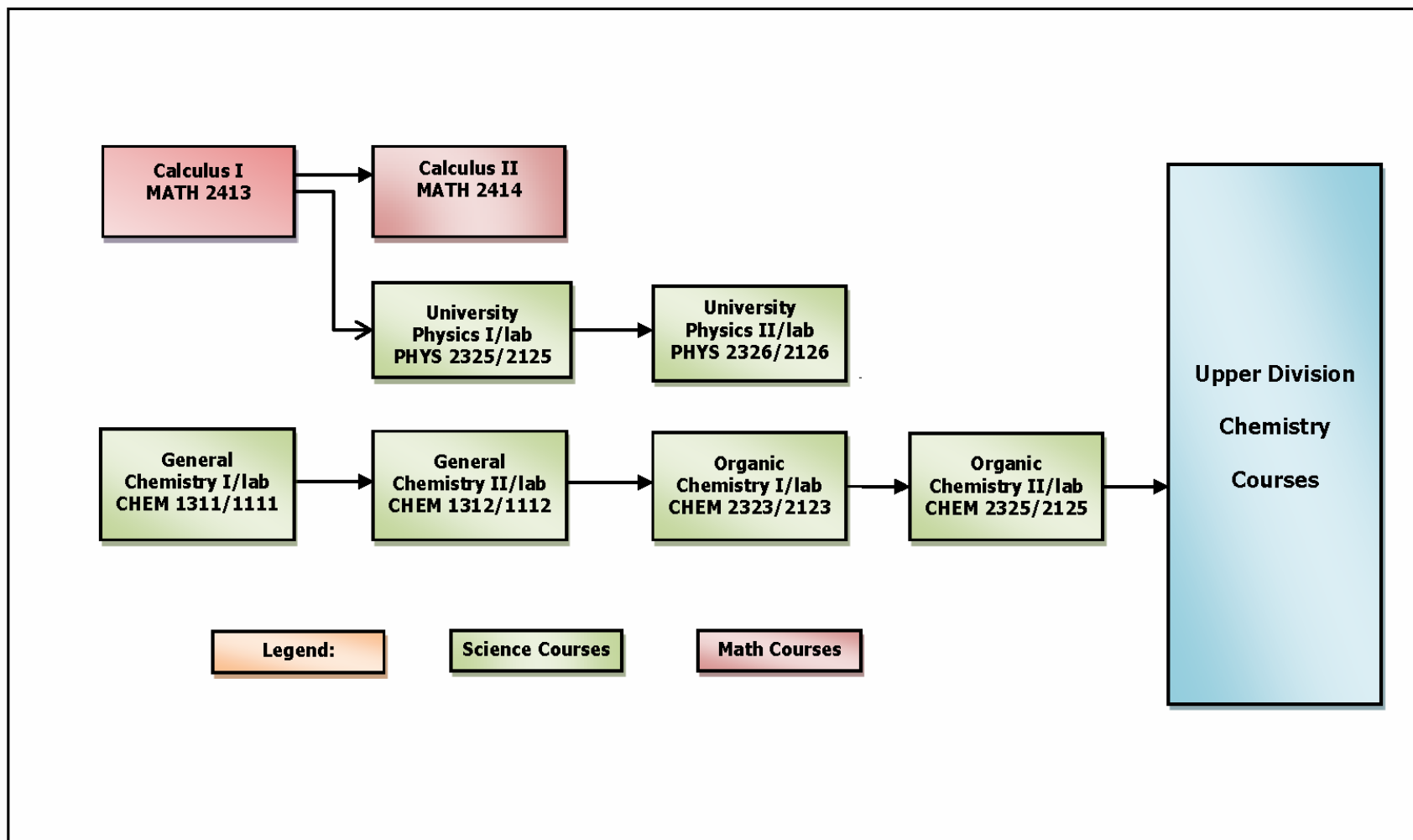
### SOPHOMORE YEAR

First Semester (Fall)		Second Semester (Spring)	
Course	SCH	Course	SCH
CHEM 2323 Organic Chemistry I	3	CHEM 2325 Organic Chemistry II	3
CHEM 2123 Organic Chemistry I lab	1	CHEM 2125 Organic Chemistry II lab	1
PHYS 2325 University Physics I	3	PHYS 2326 University Physics II	3
PHYS 2125 University Physics I lab	1	PHYS 2126 University Physics II lab	1
XXXX ##### Texas Core Curriculum Requirement	3	XXXX ##### Texas Core Curriculum Requirement	3
XXXX ##### Texas Core Curriculum Requirement	3	XXXX ##### Texas Core Curriculum Requirement	3
Semester Credit Hours 14		Semester Credit Hours 14	

#### **Notes:**

- 1 Texas Common Course Numbers are used for all TCCN-numbered courses.
- 2 The student is encouraged to check with the institution to which he/she plans to attend for transferability conditions for CHEM 2325/2125 Organic Chemistry II and its accompanying lab.

## Chemistry Prerequisite Flowchart



## Community College Program of Study for Transfer to a Civil Engineering Program

### FRESHMAN YEAR

#### First Semester (Fall)

Course	SCH
MATH 2413 Calculus I	4
CHEM 1311 General Chemistry	3
CHEM 1111 Chemistry I Laboratory	1
ENGR 1201 Introduction to Engineering	2
XXXX #### Texas Core Curriculum Requirement	3
XXXX #### Texas Core Curriculum Requirement	3
<b>Semester Credit Hours</b>	<b>16</b>

#### Second Semester (Spring)

Course	SCH
MATH 2414 Calculus II	4
PHYS 2325 University Physics I	3
PHYS 2125 University Physics I Laboratory	1
ENGR 1304 Engineering Graphics	3
MATH 1316 Plane Trigonometry	3
XXXX #### Texas Core Curriculum Requirement	3
<b>Semester Credit Hours</b>	<b>17</b>

### SOPHOMORE YEAR

#### First Semester (Fall)

Course	SCH
MATH 2415 Multi-Variable Calculus (Calculus III)	4
ENGR 1307 Plane Surveying	3
ENGR 2301 Engineering Mechanics: Statics	3
ENGR 2304 Programming for Engineers	3
or COSC 1436/1336 Programming Fundamentals	
XXXX #### Texas Core Curriculum Requirement	3
<b>Semester Credit Hours</b>	<b>16</b>

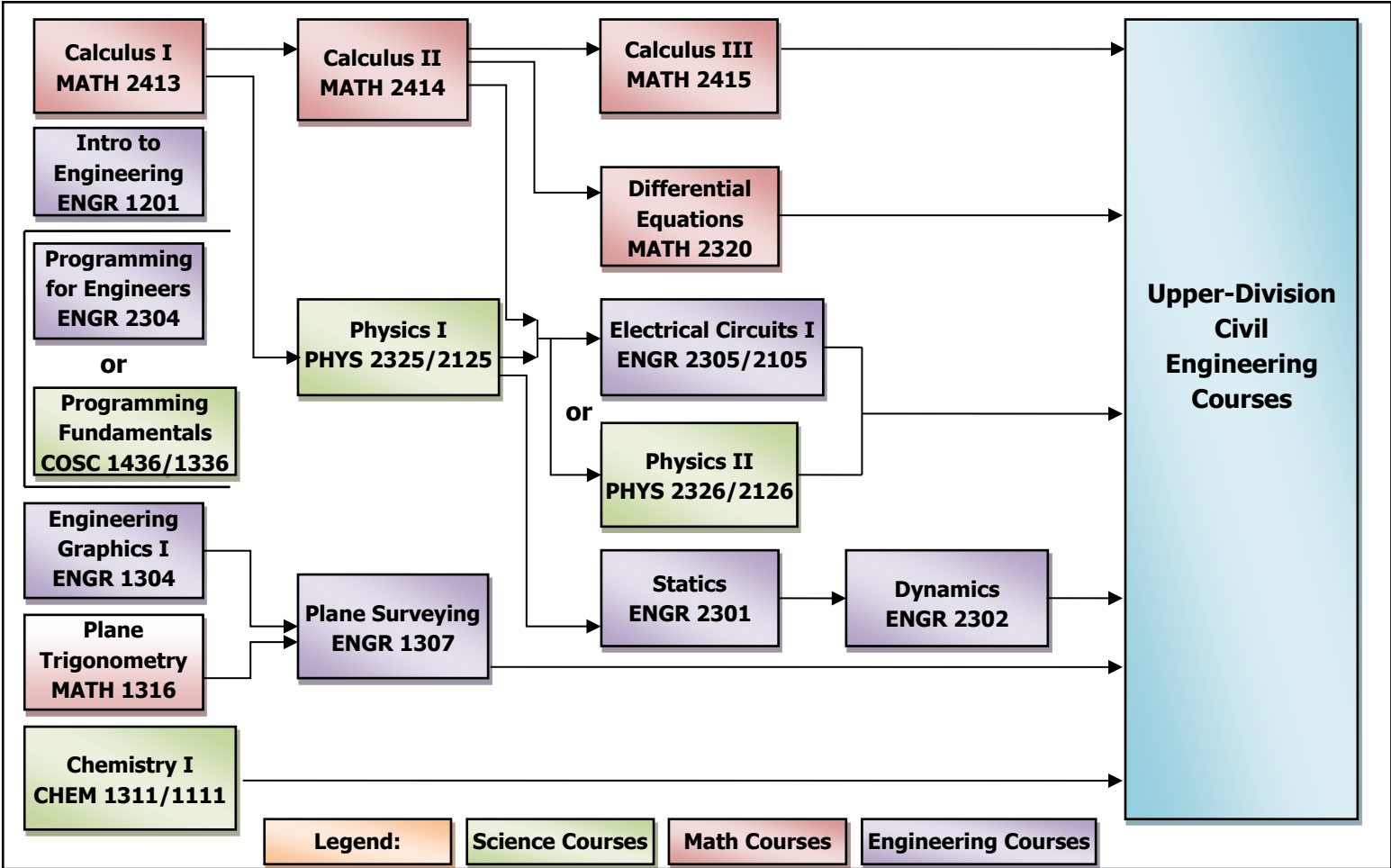
#### Second Semester (Spring)

Course	SCH
MATH 2320 Differential Equations	3
PHYS 2326/2126 University Physics II/Physics II Lab	4
or ENGR 2305/2105 Electrical Circuits I/Circuits I Lab	
ENGR 2302 Engineering Mechanics: Dynamics	3
XXXX #### Texas Core Curriculum Requirement	3
XXXX #### Texas Core Curriculum Requirement	3
<b>Semester Credit Hours</b>	<b>16</b>

#### Notes:

1. Texas Common Course Numbers are used for all TCCN-numbered courses.
2. Some civil engineering programs require Chemistry II in addition to Chemistry I. The student is advised to check with the school to which he or she intends to transfer for specific requirements.
3. Either Physics II or Electrical Circuits I may be required. The student is advised to check with the school to which he or she intends to transfer for specific applicability of this course to the engineering major.
4. Some civil engineering programs will accept the course ENGR 1201 for transfer credit and as applicable to the engineering major, while others will accept the course for transfer credit only. The student is advised to check with the school to which he or she intends to transfer for specific applicability of this course to the engineering major.
5. Civil engineering programs will accept the course COSC 1436/1336 in place of ENGR 2304.

## Civil Engineering Prerequisite Flowchart



## Community College Program of Study for Transfer to a Computer Information Systems & Sciences Program

### FRESHMAN YEAR

First Semester (Fall)			SCH	Second Semester (Spring)			SCH
BCIS 1305/1405	Business Computer Applications		3 or 4	COSC 1337/1437	Programming Fundamentals II		3 or 4
COSC 1336/1436	Programming Fundamentals I		3 or 4	MATH 1325/1425	Math for Business and Social Sciences II**		3 or 4
MATH 1324/1424	Math for Business and Social Sciences I**		3 or 4	SPCH 1315 or	Public Speaking* or		3
or 1314/1414	College Algebra			SPCH 1321	Business & Professional Communication*		
XXXX #####	TX Core Curriculum		3	XXXX #####	TX Core Curriculum		3
XXXX #####	TX Core Curriculum		3	XXXX #####	TX Core Curriculum		3
			<b>15-18</b>				<b>15-17</b>

### SOPHOMORE YEAR

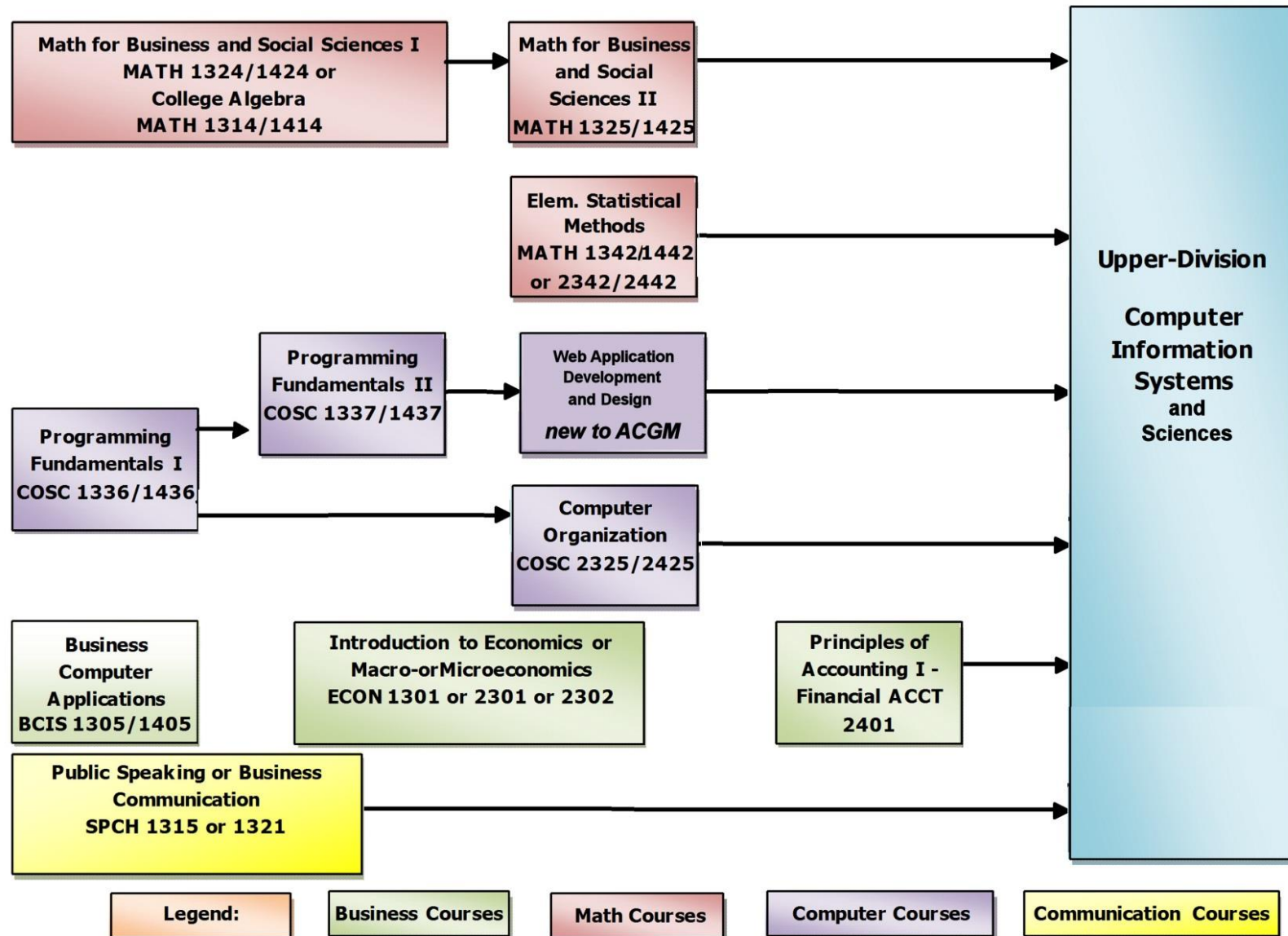
First Semester (Fall)			SCH	Second Semester (Spring)			SCH
ACCT 2401	Principles of Accounting I - Financial		3 or 4	COSC 2325/2425	Computer Organization		3 or 4
MATH 1342/1442	Elementary Statistical Methods		3	XXXX #####	Application Environment Course***		3
or 2342/2442				COSC xxxx	Web Application Development and Design		3
ECON 1301 or	Economics* or		3	New to ACGM			
2301 or 2302	Macro- or Microeconomics*			XXXX #####	TX Core Curriculum		3
XXXX #####	Application Environment Course***		3	XXXX #####	TX Core Curriculum		3
XXXX #####	TX Core Curriculum		3	XXXX #####	TX Core Curriculum		3
			<b>15-16</b>				<b>15-16</b>

\* Courses may apply towards TX Core Curriculum.

\*\* ABET accredited programs may require Calculus I. Please check with your terminal institution.

\*\*\* Please check with your terminal institution for applicable courses.

## Computer Information Systems & Sciences Prerequisite Flowchart





## Community College Program of Study for Transfer to an Electrical Engineering Program

### FRESHMAN YEAR

First Semester (Fall)			Second Semester (Spring)		
	Course	SCH		Course	SCH
ATH 2413	Calculus I	4	MATH 2414	Calculus II	4
HEM 1311	General Chemistry	3	PHYS 2325	University Physics I	3
HEM 1111	Chemistry I Laboratory	1	PHYS 2125	University Physics I Laboratory	1
JGR 1201	Introduction to Engineering	2	MAH 2305	Discrete Math	3
ECON 2301 or 2302	Micro- or Macroeconomics	3	or ENGR 2308	Engineering Economics	
XXXX ####	Texas Core Curriculum Requirement	3	XXXX ####	Texas Core Curriculum Requirement	3
			XXXX ####	Texas Core Curriculum Requirement	3
<b>Semester Credit Hours</b>		<b>16</b>	<b>Semester Credit Hours</b>		<b>17</b>

### SOPHOMORE YEAR

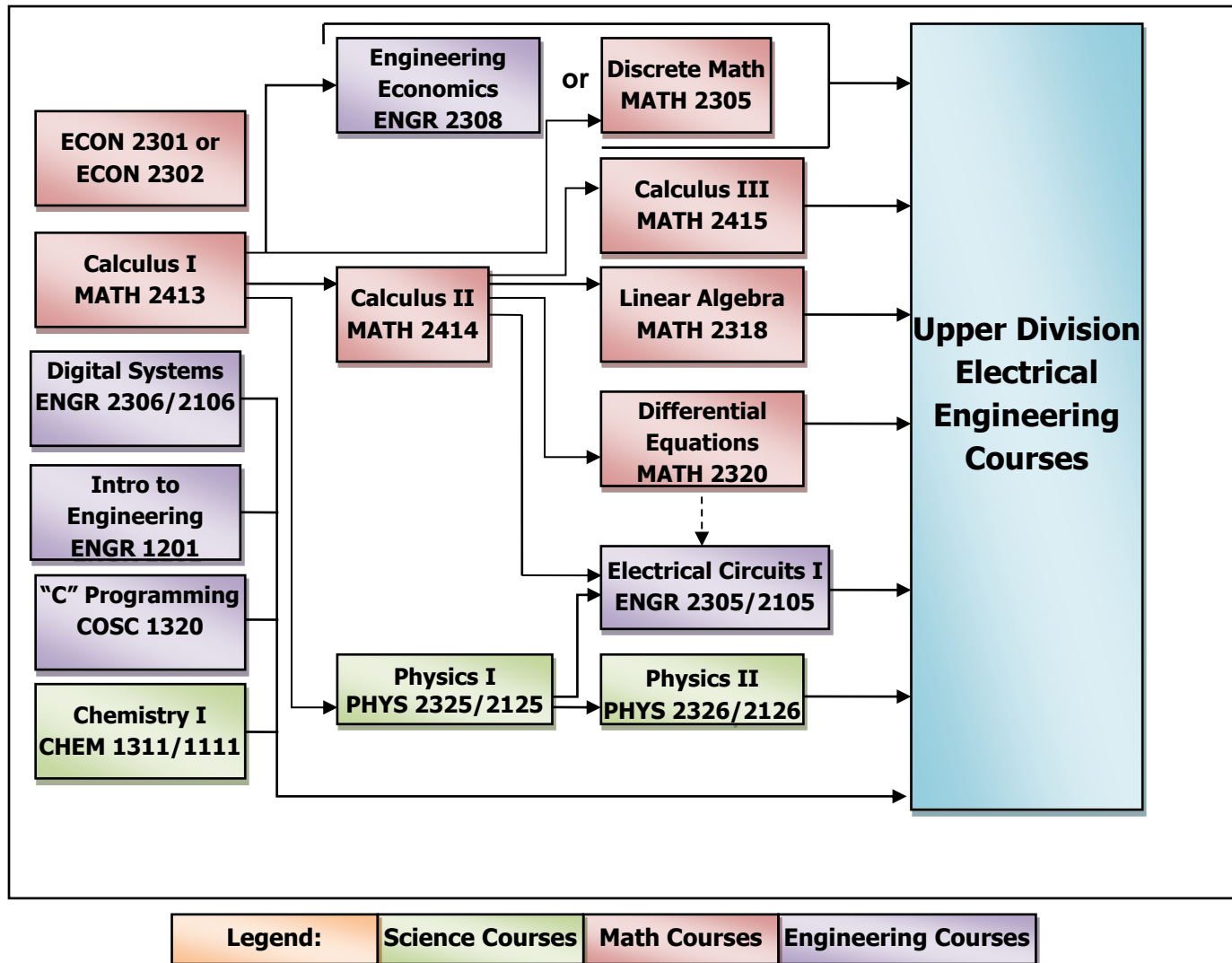
First Semester (Fall)			Second Semester (Spring)		
	Course	SCH		Course	SCH
ATH 2415	Multi-Variable Calculus (I & II)	4	MATH 2320	Differential Equations	3
PHYS 2326	University Physics II	3	EENG 2305	Electrical Circuits I	3
PHYS 2126	University Physics II Laboratory	1	EENG 2105	Electrical Circuits I Laboratory	1
JGR 2306	Digital Systems	3	MATH 2318	Linear Algebra	3
JGR 2106	Digital Systems Laboratory	1	XXXX ####	Texas Core Curriculum Requirement	3
JSC 1320	"C" Programming	3	XXXX ####	Texas Core Curriculum Requirement	3
XXXX ####	Texas Core Curriculum Requirement	3			
<b>Semester Credit Hours</b>		<b>18</b>	<b>Semester Credit Hours</b>		<b>16</b>

#### Notes:

1. Texas Common Course Numbers are used for all TCCN-numbered courses.
2. Some electrical engineering programs require Chemistry II in addition to Chemistry I. The student is advised to check with the school to which he or she intends to transfer for specific requirements.
3. Some electrical engineering programs will accept the course ENGR 1201 for transfer credit and as applicable to the engineering major, while others will accept the course for transfer credit only. The student is advised to check with the school to which he or she intends to transfer for specific applicability of this course to the engineering major.

Note: Program of Study revised 11/15/2013 to reflect the Academic Course Guide Manual (ACGM) Committee's approval to modify the ACGM course ENGR 2308 Engineering Economics to remove the prerequisites ECON 2301 Principles of Macroeconomics or ECON 2302 Principles of Microeconomics.

## Prerequisite Flow Chart for Transfer to an Electrical Engineering Program



Note: Prerequisite Flowchart revised 11/15/2013 to reflect the Academic Course Guide Manual (ACGM) Committee's approval to modify the ACGM course ENGR 2308 Engineering Economics to remove the prerequisites ECON 2301 Principles of Macroeconomics or ECON 2302 Principles of Microeconomics.

## Community College Program of Study for Transfer to an Industrial Engineering Program

First Semester (Fall)			Second Semester (Spring)		
	Course	SCH		Course	SCH
MATH 2413	Calculus I	4	MATH 2414	Calculus II	4
CHEM 1311	General Chemistry	3	PHYS 2325	University Physics I	3
CHEM 1111	Chemistry I Laboratory	1	PHYS 2125	University Physics I Laboratory	1
ENGR 1201	Introduction to Engineering	2	ENGR 1304	Engineering Graphics	3
XXXX ####	Texas Core Curriculum Requirement	3	XXXX ####	Texas Core Curriculum Requirement	3
XXXX ####	Texas Core Curriculum Requirement	3	XXXX ####	Texas Core Curriculum Requirement	3
		<b>Semester Credit Hours</b>			<b>Semester Credit Hours</b>
		<b>16</b>			<b>17</b>

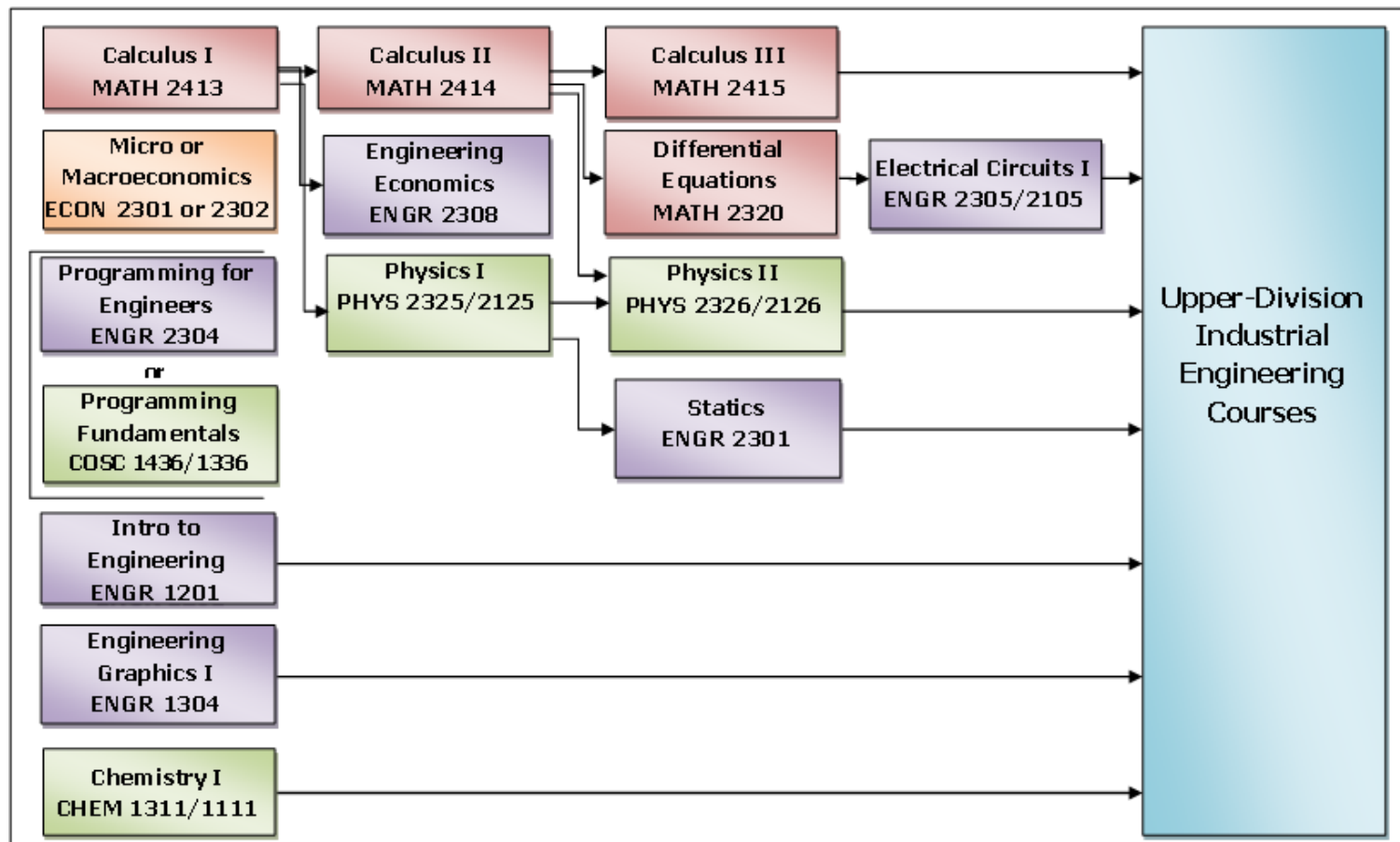
### SOPHOMORE YEAR

First Semester (Fall)			Second Semester (Spring)		
	Course	SCH		Course	SCH
MATH 2415	Multi-Variable Calculus (Calculus III)	4	MATH 2320	Differential Equations	3
PHYS 2326	University Physics II	3	ENGR 2305	Electrical Circuits I	3
PHYS 2126	University Physics II Laboratory	1	ENGR 2105	Electrical Circuits I Laboratory	1
ENGR 2301	Engineering Mechanics: Statics	3	ENGR 2308	Engineering Economics	3
ENGR 2304	Programming for Engineers	3	XXXX ####	Texas Core Curriculum Requirement	3
<u>or</u> COSC 1436/1336	Programming Fundamentals		XXXX ####	Texas Core Curriculum Requirement	3
	Micro or				
ECON 2301 or 2302	Macroeconomics	3			
		<b>Semester Credit Hours</b>			<b>Semester Credit Hours</b>
		<b>17</b>			<b>16</b>

#### Notes:

1. Texas Common Course Numbers are used for all TCCN-numbered courses.
2. Some industrial engineering programs require Chemistry II in addition to Chemistry I. The student is advised to check with the school to which he or she intends to transfer for specific requirements.
3. Some industrial engineering programs will accept the course ENGR 1201 for transfer credit and as applicable to the engineering major, while others will accept the course for transfer credit only. The student is advised to check with the school to which he or she intends to transfer for specific applicability of this course to the engineering major.
4. Industrial engineering programs will accept the course COSC 1436/1336 in place of ENGR 2304.

## Prerequisite Flow Chart for Transfer to an Industrial Engineering Program



Legend:	Science Courses	Math Courses	Engineering Courses	Core Courses
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Note: Prerequisite Flowchart revised 11/15/2013 to reflect the Academic Course Guide Manual (ACGM) Committee's approval to modify the ACGM course ENGR 2308 Engineering Economics to remove the prerequisites ECON 2301 Principles of Macroeconomics or ECON 2302 Principles of Microeconomics.

## Community College Program of Study for Transfer to a Management Information Systems Program

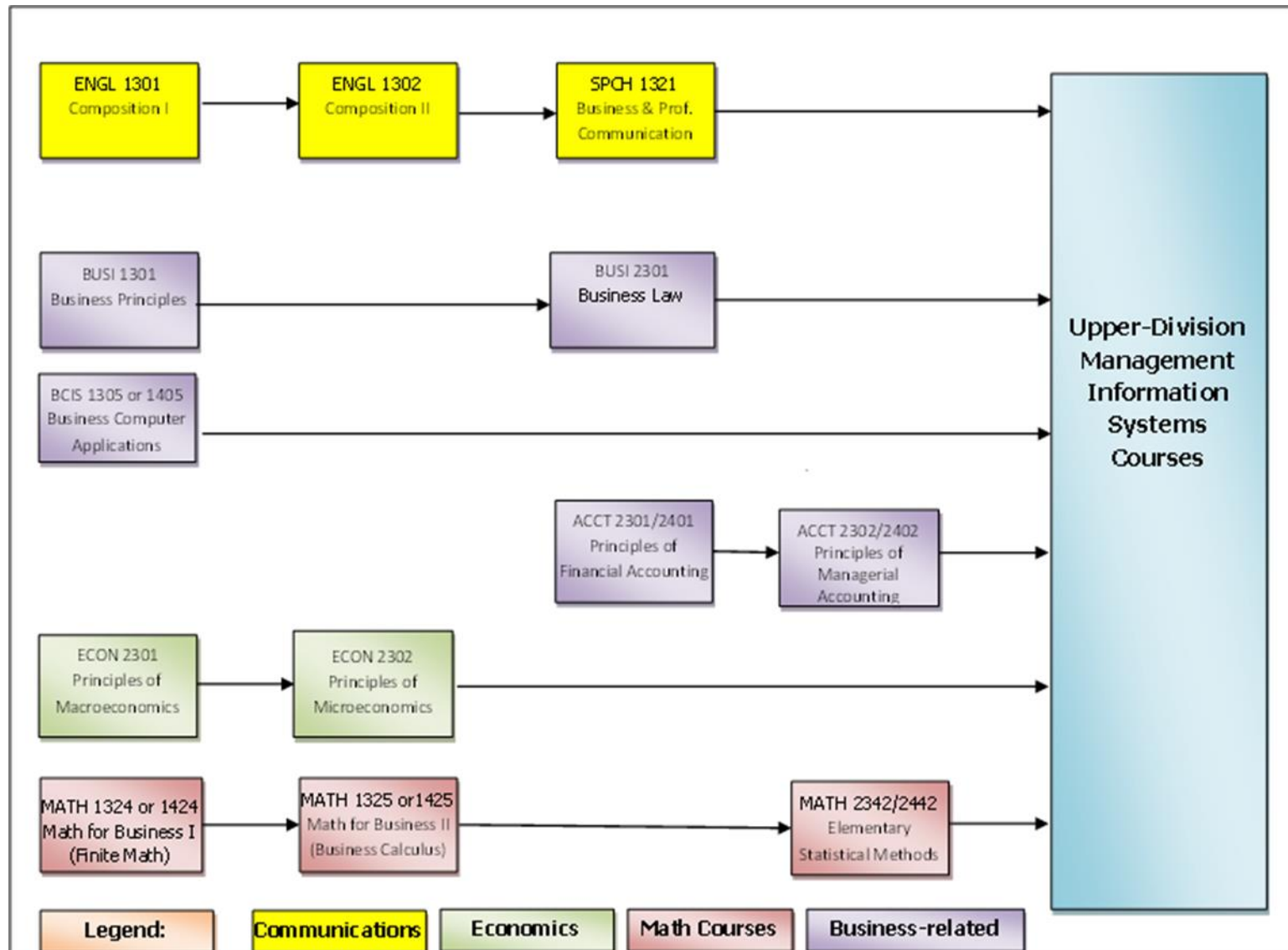
### FRESHMAN YEAR

First Semester (Fall)			SCH	Second Semester (Spring)			SCH
ECON 2301	Principles of Macroeconomics		3	ECON 2302	Principles of Microeconomics		3
BCIS 1305 or 1405	Business Computer Applications		3 or 4	ENGL 1302	Composition II		3
BUSI 1301	Business Principles		3	MATH 1325 or 1425	Math for Business II		3 or 4
ENGL 1301	Composition I		3	XXXX #####	TX Core Curriculum		3
MATH 1324	Math for Business I		3	XXXX #####	TX Core Curriculum		3
			<b>15 or 16</b>				<b>15 or 16</b>

### SOPHOMORE YEAR

First Semester (Fall)			SCH	Second Semester (Spring)			SCH
BUSI 2301	Business Law		3	MATH 2342 or 2442	Elementary Statistical Methods		3 or 4
SPCH 1321	Business & Professional Communication		3	XXXX #####	TX Core Curriculum		3
ACCT 2301 or 2401	Principles of Financial Accounting		3 or 4	ACCT 2302 or 2402	Principles of Managerial Accounting		3 or 4
XXXX #####	TX Core Curriculum		3	XXXX #####	TX Core Curriculum		3
XXXX #####	TX Core Curriculum		3	XXXX #####	TX Core Curriculum		3
			<b>15 or 16</b>				<b>15 or 16</b>

## Management Information Systems Prerequisite Flowchart



## Community College Program of Study for Transfer to a Mathematics Program

### FRESHMAN YEAR - Recommended Scheduling Sequence\*

First Semester (Fall)	SCH	Second Semester (Spring)	SCH
MATH 2413 Calculus I*	4	MATH 2414 Calculus II	4
Communication Core Curriculum Course	3	Computer Programming Course	3
Core Curriculum Course	3	Communication Core Curriculum Course	3
Core Curriculum Course	3	Core Curriculum Course	3
Core Curriculum Course	3	Core Curriculum Course	3
TOTAL	16	TOTAL	16

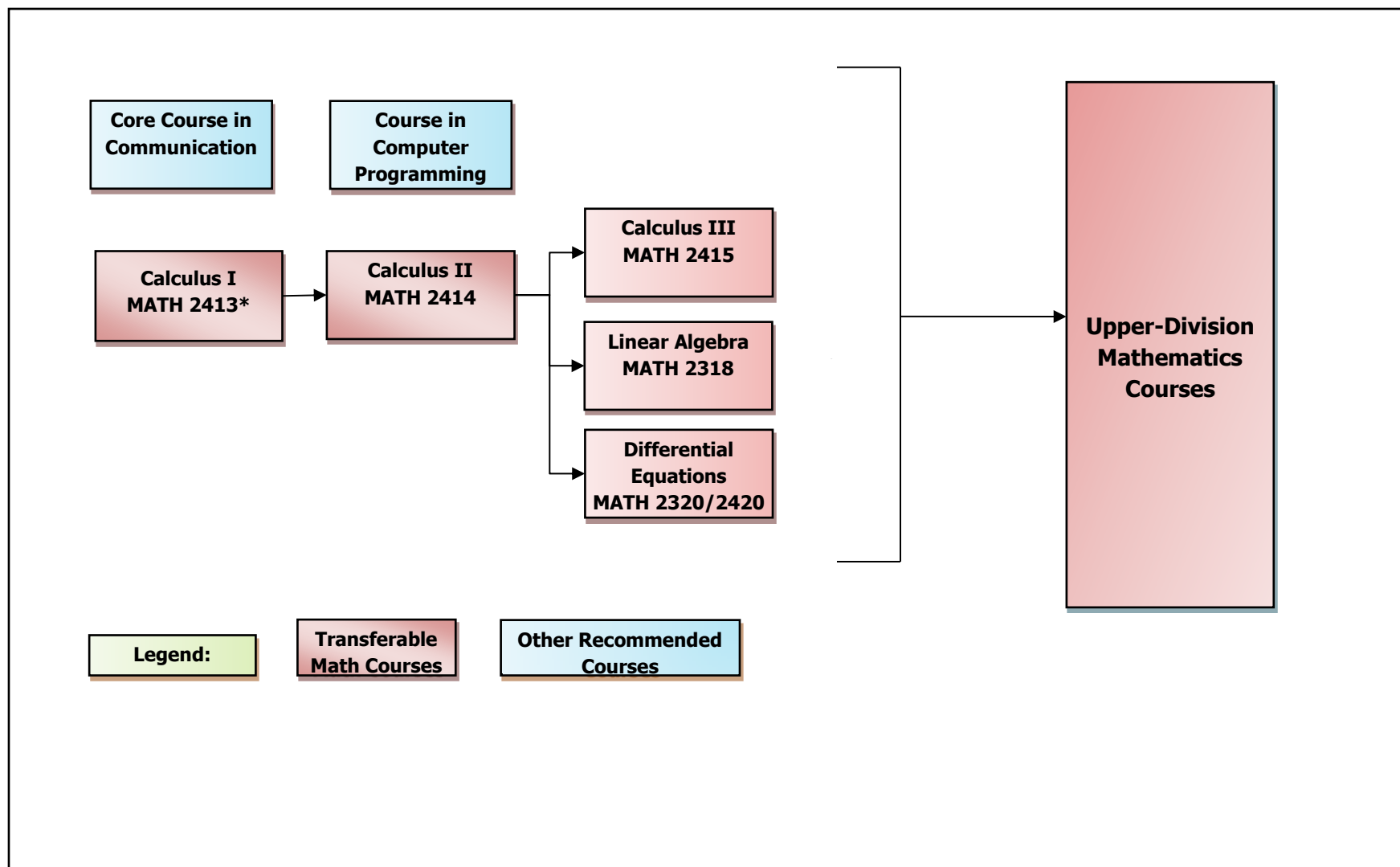
### SOPHOMORE YEAR - Recommended Scheduling Sequence\*

First Semester (Fall)	SCH	Second Semester (Spring)	SCH
MATH 2415 Calculus III**	4	MATH 2320/2420 Differential Equations**	3-4
MATH 2318 Linear Algebra**	3	Core Curriculum Course	3
Core Curriculum Course	3	Core Curriculum Course	3
Core Curriculum Course	3	Core Curriculum Course	3
Core Curriculum Course	3		
TOTAL	16	TOTAL	13

\* Prerequisite courses may be required before beginning Calculus sequence.

\*\* Students may need to complete additional advanced level mathematics courses to meet degree requirements.

## Mathematics Prerequisite Flowchart





## Community College Program of Study for Transfer to a Mechanical Engineering Program

### FRESHMAN YEAR

#### First Semester (Fall)

Course	SCH
MATH 2413 Calculus I	4
CHEM 1311 General Chemistry	3
CHEM 1111 Chemistry I Laboratory	1
ENGR 1201 Introduction to Engineering	2
XXXX #### Texas Core Curriculum Requirement	3
XXXX #### Texas Core Curriculum Requirement	3
<b>Semester Credit Hours</b>	<b>16</b>

#### Second Semester (Spring)

Course	SCH
MATH 2414 Calculus II	4
PHYS 2325 University Physics I	3
PHYS 2125 University Physics I Laboratory	1
ENGR 1304 Engineering Graphics	3
XXXX #### Texas Core Curriculum Requirement	3
XXXX #### Texas Core Curriculum Requirement	3
<b>Semester Credit Hours</b>	<b>17</b>

### SOPHOMORE YEAR

#### First Semester (Fall)

Course	SCH
MATH 2415 Multi-Variable Calculus (Calculus III)	4
PHYS 2326 University Physics II	3
PHYS 2126 University Physics II Laboratory	1
ENGR 2301 Engineering Mechanics: Statics	3
ENGR 2304 Programming for Engineers	3
or COSC 1436/1336 Programming Fundamentals	
XXXX #### Texas Core Curriculum Requirement	3
<b>Semester Credit Hours</b>	<b>17</b>

#### Second Semester (Spring)

Course	SCH
MATH 2320 Differential Equations	3
ENGR 2305 Electrical Circuits I	3
ENGR 2105 Electrical Circuits I Laboratory	1
ENGR 2302 Engineering Mechanics: Dynamics	3
XXXX #### Texas Core Curriculum Requirement	3
XXXX #### Texas Core Curriculum Requirement	3
<b>Semester Credit Hours</b>	<b>16</b>

#### Notes:

1. Texas Common Course Numbers are used for all TCCN-numbered courses.
2. Some mechanical engineering programs require Chemistry II in addition to Chemistry I. The student is advised to check with the school to which he or she intends to transfer for specific requirements.
3. Some mechanical engineering programs will accept the course ENGR 1201 for transfer credit and as applicable to the engineering major, while others will accept the course for transfer credit only. The student is advised to check with the school to which he or she intends to transfer for specific applicability of this course to the engineering major.
4. Mechanical engineering programs will accept the course COSC 1436/1336 in place of ENGR 2304.

## Prerequisite Flow Chart for Transfer to a Mechanical Engineering Program

